COMMENTS OF PACIFIC GAS AND ELECTRIC COMPANY TO THE CALIFORNIA AIR RESOURCES BOARD ON GREENHOUSE GAS ALLOWANCE ALLOCATION AND DISTRIBUTION UNDER AB 32

April 3, 2008

Pacific Gas and Electric Company ("PG&E") would like to thank the California Air Resources Board ("CARB") for its well developed white paper on the topic of GHG emission allowances. We commend the staff for its thorough and systematic look at the issues and identification of key questions that should be addressed as the CARB prepares the AB 32 Scoping Plan.

PG&E Principles for Allowance Allocation and Distribution

PG&E believes allocation of GHG emissions allowances should be designed to achieve three over-arching objectives:

- 1. Speed the transition to a low-carbon economy, while achieving sustained and significant long-term GHG reductions;
- 2. Mitigate the costs incurred by customers to achieve these long-term GHG reductions; and
- 3. Position California well and demonstrate leadership in the context of emerging regional, federal and international GHG programs.

Allowance allocation can be a key component to creating the right incentives for long term GHG reductions as well as an important lever with which to manage costs to consumers. However, there are several other critical design elements that will support these goals and enable the CARB to design a system that results in significant reductions at a reasonable cost. These additional elements which the CARB should address in the Scoping Plan include:

- Fair apportionment of the compliance responsibility among the various sectors that would be included in a cap-and-trade program;
- Equitable reduction contributions from those sectors that will participate in the climate program through command and control measures or other initiatives;

- Cost containment measures, including the well-established use of offsets and other methods to mitigate costs to customers; and
- Establishing a reasonable emission reduction trajectory and allowing for flexibility in meeting annual compliance obligations that recognize both the availability of low-carbon technologies and the annual variability that will occur in emissions as a result of climatic and economic conditions beyond the control of the various compliance entities.

Based on the over-arching objectives listed above, PG&E recommends that in the Electric Sector emissions allowances be allocated to Load Serving Entities ("LSEs") for the benefit of their customers. LSE customers will bear the ultimate costs of meeting the sustained GHG reduction goals in the Electric Sector, and, therefore, those customers should receive the value of the allowances used to achieve those reductions.

The most equitable methodology by which to allocate emission allowances in the Electric Sector, and the one we believe will best expedite the transition to a low carbon economy, is based on an output metric such as retail electricity sales adjusted for verified customer energy efficiency savings. An output allocation method achieves the following objectives:

- Recognizes and encourages early action, including the years leading up to 2012, as required by AB 32;
- Encourages aggressive deployment of energy efficiency; and
- Is consistent with the recommendations the State has made on national climate change policy and supports California's leadership position in the context of emerging regional, national and international programs.

An historical emissions or grandfathering approach does not recognize prior investments made in zero or low-carbon technologies, and provides an incentive to delay such activities in the hope of accumulating more allowances. Adopting such an approach for AB 32 also would deposition California relative to other regions in the United States in the design of a federal program. As the State recently noted in its recommendations on federal climate policy, "Free distributions based solely on historic emissions will only serve to reward the biggest polluters at the expense of consumers and penalize early leadership."

State of California, "Recommendations for Federal Climate Policy", October 4, 2007

The CARB asked the following four questions of the participants at the March 17th Workshop. If a cap and trade program is implemented:

- 1. What method should we use to distribute the allowances?
- 2. How should allowance value be used? And, if the allowance value should be used to ease the costs of regulation for entities, who should receive them and how many allowances should each entity receive?
- 3. How should allowances be distributed to new entities and how should entities that cease operating in California be treated?
- 4. How should the methods of distributing allowances in a cap-and-trade program change in future years?

PG&E's responses to these specific questions are below. In addition, PG&E has attached the comments on allocation issues that it has previously provided in the CPUC and Energy Commission AB 32 proceeding, CPUC Docket No. 06-04-009.

What method should we use to distribute the allowances?

The CARB lists two basic alternatives for distributing the value of the allowances: (1) auctioned or sold to compliance entities; or (2) free allocation to compliance entities. A third alternative is to give allowances to third party entities such as regulated electric distribution companies for public purposes. The CARB could allocate a portion of allowances to local electric utilities (distribution companies), including a provision mandating that the allowance value be returned to utility customers through customer rebates and energy efficiency programs. The local electric utility would receive allowances based on their proportional share of electricity deliveries. The company would then sell the allowances they receive on a nondiscriminatory basis to electric generating facilities and first deliverers covered by the emissions cap, and any revenues generated would be returned to their customers. Local electric utilities are uniquely positioned for this role because: (1) they have established financial relationships with electric customers,; (2) they are subject to state utility commission or board oversight; and (3) many have existing energy efficiency programs to build on.

Once the allowances are allocated to local electric utilities for consumer benefit, PG&E recommends utilizing an auction approach to generate the proceeds to return to electric utility customers. An auction approach is the best mechanism to encourage market liquidity and to

create equal access to allowances for both utility owned and independent generation. It also has the benefit of creating a transparent price signal for the market. The ETAAC members agree there is a benefit to holding auctions, including price discovery:

"Some amount of auctioning is necessary for establishing a clear and early price signal. Auctions expose the true market-clearing price for all GHG emissions under a cap, whereas free allocation systems conceal mitigation prices for emission reductions that are not traded." - ETAAC Final Report February 11, 2008, page 9-4.

Finally, those who express concern regarding the potential for market manipulation often connect this risk specifically with the use of auctions, but without auctions, there is only the secondary market from which to purchase any needed allowances. This secondary market may also be susceptible to manipulation. The CARB can substantially mitigate these risks through constructing well-designed auction rules, providing secondary market oversight and incorporating effective cost containment mechanisms for the program.

PG&E suggests, in addition to incorporating the Regional Greenhouse Gas Initiative States' analysis, the CARB also consider establishing a process for official stakeholder engagement and comment on auction design.

How should allowance value be used? And, if the allowance value should be used to ease the costs of regulation for entities, who should receive them and how many allowances should each entity receive?

PG&E recommends that, for the electric sector, emissions allowances should be allocated to LSEs for the benefit of their customers. This is because, regardless of the point of regulation, LSE customers will bear the ultimate costs of meeting GHG reduction goals, and, therefore, those customers should receive the value of the allowances used to achieve those reductions.²

The use of the allowance value can significantly affect the distribution of economic costs and incentives associated with meeting GHG emission targets. For the electric sector, PG&E supports the distribution of allowances for the benefit of electricity consumers, while promoting investment in new low-carbon technologies or programs that also benefit customers and the

See, for example, the Congressional Budget Office's Trade-Offs in Allocating Allowances for CO2 Emissions (http://www.cbo.gov/ftpdocs/80xx/doc8027/04-25-Cap_Trade.pdf), the National Commission on Energy Policy's Allocating Allowances in a Greenhouse Gas Trading System (http://www.energycommission.org/ht/display/ContentDetails/i/1578/pid/493), and Resources for the Future's Compensation Rules for Climate Policy in the Electricity Sector (http://www.rff.org/documents/RFF-DP-07-41.pdf)

communities we serve. Households and businesses at the end of the electricity supply chain will ultimately bear the costs - in the form of higher electricity prices - of a GHG cap-and-trade program. Therefore consumers should be entitled to the value inherent in the allowances in order to partially offset increased costs as well as provide capital to help these consumers transition to a low-carbon economy.

In the electric sector, the most equitable allocation methodology, and the one PG&E believes will speed the transition to a low carbon economy, is to allocate allowances based on an output metric. An output method, allocating allowances to LSEs based on retail electric sales and adjusted for verified customer energy efficiency savings, recognizes the investments made by utility customers who have already paid for increased supplies of low-carbon energy or for energy efficiency and demand response programs. At the same time, an output-based approach encourages LSEs who have not made these early investments on behalf of their customers to find the most expedient and cost-effective means of doing so as soon as possible.

By contrast, a grandfathering approach, based on historical emissions, has the opposite effect. It does not recognize investments made in zero or low carbon technologies, and it provides an incentive to delay such activities in the hope of accumulating more allowances. NRDC, UCS and GPI have also voiced concern over a grandfathering approach in their comments filed with the CPUC and Energy Commission, "California should not shield those entities who took on the risks of high GHG-emitting resources, at the expense of those who managed the risk well, by grandfathering allowances." Allocation of allowances to LSEs for the benefit of their customers based on current output or sales will ensure that the value and proceeds resulting from the sale of allowances are matched with both the investments made by customers in low carbon resources in the past and the costs incurred by customers to further reduce emissions going forward. Allocating to LSE's based on historical emissions associated with load requires assumptions regarding emissions rates of the market purchases portion of each utility's portfolio which will result in tracking and administrative difficulties and the potential for market distortions.

Using a historical emissions basis for allocation to LSE's will significantly deposition California customers in emerging regional and federal programs. As presented in PG&E's

Reply Comments of The Natural Resources Defense Council, Union of Concerned Scientists and Green Power Institute on Allowance Allocation Issues, Docket R.06-04-009, CPUC, November 14, 2007, pp. 4.

November 14, 2007, reply comments on allocation issues before the CPUC and Energy Commission, PG&E has performed a calculation using publicly available data from the U. S. Department of Energy, Energy Information Administration, to compare the effects on California of a national cap-and-trade program that allocates GHG emissions allowances on a "grandfathered" or historical emissions basis, to a program that allocates allowances based on output or sales. Using 2006 recorded sales and GHG emissions, and assuming an allowance price of \$20/metric ton of CO2, the cost of allowances to California would be \$2.1 billion per year higher under a "grandfathered" or historical emissions based allocation method, than under a sales-based method.⁴

PG&E's proposal is equitable to retail providers with varying emissions rates. It is true that a utility's current emissions are one element that determines the average cost to the utility customers. It is also true, however, that low emitting utilities will have fewer low cost GHG reduction opportunities because they have already captured a significant portion of these opportunities through prior investments and actions funded by their customers in electric rates. On the other hand, high emitting utilities may have a greater quantity of lower cost emission reduction opportunities within their own portfolio, namely the ability to reduce high emitting sources in their portfolio and to increase CEE. Finally, PG&E's proposal is equitable because, consistent with other environmental compliance costs, those entities with high emitting resources in their portfolio should be responsible for the costs of those emissions.

In the white paper the CARB states that early action can be rewarded with allowance value. While PG&E agrees that this may provide a reward for early action, this incentive will not be as transparent and therefore weakens any intended economic incentive as compared to the clear incentive provided through an output based allocation method.

How should allowances be distributed to new entities and how should entities that cease operating in California be treated?

Having auctions on a relatively frequent basis will provide new entrants that have a compliance responsibility with an opportunity to acquire allowances. In addition, PG&E expects that a secondary market will emerge when a sufficient volume of allowances are in the market. In order to protect customers and capture demographic changes, the allocation methodology

Reply Comments of PG&E, Docket R.06-04-009, CPUC, November 14, 2007, pp. 23-24.

which has been proposed by PG&E - retail sales plus verified energy efficiency - can effectively be updated and would encourage aggressive pursuit of energy efficiency and investment in low-emitting technologies. Updating a historical emissions methodology, on the other hand, perpetuates the incentive to delay taking action. This approach would not drive investments in clean energy supply options or capture expected demographic changes, which could create inequities going forward.

How should the methods of distributing allowances in a cap-and-trade program change in future years?

PG&E's method of allocation does not need to change over time. A retail sales plus verified customer energy efficiency methodology adequately adjusts for changes in the market and creates the proper incentives as well as facilitating the addition of new entrants.